question, which is deregulation doesn't have to happen all at once, does it?

A As I said, it is a design question. One can -- I in fact submitted testimony to the FCC on behalf of USTA on just this question, on how one might think about staging deregulation . It doesn't have to be flash cut overnight. It ought to be predictable. It ought not to be a system to be gamed, so on and so forth.

Q You just raised a question in my mind. In the times that you have provided testimony, either to state public utility commissions or to the FCC, have you ever testified on anyone's behalf other than the telephone companies or their trade association?

A On communication matters?

Q Yes.

A Because I have testified on a range of other matters.

I filed testimony a couple of times on behalf of AT&T over the years. They don't call me any more.

(Laughter)

THE WITNESS: I think that's it.

MS. BURDICK: Q When you provided testimony on behalf of AT&T, was that before the breakup or after?

A I think I put in one piece after on the issue of deregulation.

Q In looking at Professor Kahn's third simple rule, price protection must be provided for essential services not yet subject to widespread competition, in that context, how do you define widespread competition?

A This is intended to be a statement of general principles rather than design of a specific regulatory regime.

I don't think that concept as a general definition is useful in a wide set of contexts itself. As we have been discussing, the question of triggers and phasing really needs to be thought through in context. ]

So I don't -- I don't -- it's intended to be plain English here. And to just say what it says, an operational definition requires context-specific thought.

Q Now, Element 4 -- or simple rule No. 4 says:

"Inputs essential for competition must be available on a nondiscriminatory basis, and competing LEC retail services must pass an imputation test."

You say, "requirements already provided for and being met by Pacific in D. 89-10-031 and D. 94-09-065."

Were you aware that Decision 94-09-065 was on appeal?

A I was not. It doesn't surprise me, but I was not aware of that.

Q So, consequently, you were not aware that it was subject to change.

A Assuming that most regulatory decisions are, in the course of events, subject to change, but I didn't have a specific awareness with regard to this one.

Q Upon what did you base the conclusion that Pacific was meeting the requirements provided for in D. 89-10-031 and D. 94-09-065?

A I relied for that statement on conversations with my -- with my coauthors only on this one.

This was an addition intended to link this general -- this general principle in a general way with these decisions to indicate that it had been addressed. And I simply verified, again through my conversation with Dr. Tardiff, that those were the issues addressed -- that those issues, rather, were addressed in those proceedings. I did not inquire further.

Q So would it be fair to say that you're not certain as to what Dr. Tardiff based his conclusion that Pacific was, in fact, meeting those requirements?

A As I sit here, that's fair.

Q Let me direct your attention to page 9 of the attachment, specifically about, oh, a third of the way down, five lines in the first full paragraph, where you state:

"With the onset of local exchange competition, the regulator's control could be redirected to defining minimum standards. . ."

In that context of defining minimum standards, could the regulator direct their attention to setting service quality standards?

A That's what's intended there, that regulatory control, even in a competitive environment, would legitimately be concerned with quality standards as, of course, in a range of other products for which prices aren't regulated.

Q On page 10, specifically Footnote 13, where you refer to:

> ". . . Pacific's earnings growth has averaged 3.5 percent per year, while the industry has enjoyed annual earnings growth of over 6 percent per year."

Do you see that?

A Yes.

Q Now, just to follow up on the questions that Mr. Faber asked you earlier, in your reference there to the "industry," are you talking about the RBOCs in GTEC?

A That's my recollection, yes.

Q Now, if we were to step outside the context of the telecommunications industry generally, even including cellular and the interexchange carriers that Mr. Faber mentioned, if we were to look at, for instance, the Dow Jones industrial top 500 companies, wouldn't 3.5 percent per year earnings growth be a respectable, healthy growth rate?

A Well, the Dow Jones doesn't cover 500. Standard & Poor's does.

Q Thank you for the clarification.

A And I think -- I think we, in fact, did look at that. And I don't recall, but I think the Standard & Poor's 500 did better than 3-1/2 percent a year, but I'd have to go look at my notes to see.

Q When you say better, how much better; do you recall?

A I don't have a specific recollection. I saw -- I believe I saw the number, and the difference was in that direction. I could look it up, but I can't recall now.

Q Let me go back to my original question which was, if we step outside the telecommunications industry particularly and look at business generally, isn't it true that 3.5 percent per year earnings growth is a respectable and healthy growth rate?

A Over a very long term, yes. Whether it was particularly respectable and healthy over this period, which includes recovery from a recession, I'd have to look at the numbers.

Q Now, directing your attention to the top of page 14, specifically the first full sentence at the top of that page --

MR. STOVER: I'm sorry; what page was that again?

MS. BURDICK: Page 14.

Q "These changes support the

elimination of the price-cap formula, because stable prices require that Pacific's productivity be as large as the inflation rate."
Do you see that?
A I see that sentence.
Q Now, if the inflation rate is 3 percent, and Pacific's earnings growth rate is 3.5 percent, isn't that situation conducive to stable prices?
A By itself, that doesn't tell you anything about where prices go. You really have to work through productivity and everything else we've been talking about.
You can't go from earnings growth and price growth to and inflation to prices.
Q So earnings growth, in your mind, has no correlation whatsoever to productivity?
A No, I didn't say that. I just said as an arithmetic matter, you can't make a simple one-to-one connection.
Q Well, take us through the more complicated analysis that would get us there.
If you have 3.5 percent earnings growth, what does that say about your productivity, if anything?
A It doesn't necessarily say anything. That could be, for instance -- just again, that could be absolutely pure volume with no productivity in any particular business. You just simply can't link it up.

I could be doing the same things the same way with the same inputs and outputs, and I could do 3-1/2 percent more a year, and my earnings would grow to 3-1/2 percent.

Or, alternatively, everything could be constant, all my inputs and outputs, but my prices go up and then earnings would go up. Prices would go up -- my output prices would go up by less than 3-1/2 percent. To have my earnings grow by 3-1/2, that would depend on what mix of inputs and outputs that I have.

So it's really not a quick correspondence.

Q But isn't it true that your testimony earlier was that Pacific has in fact achieved productivity efficiencies under the price-cap regime?

A Yes.

Q So it's not a situation where Pacific's earnings growth of 3.5 percent is a result of just pure volume and sales, no other deviation?

A Well, it's a result of a lot of forces, productivity, price decreases, slowdown in the growth of output. It's all of the things that are discussed in the testimony, whatever accounting conventions are applied, depreciation rates so on and so forth.

So it's a resultant of a lot of forces, and you can't just point at one of them.

Q Now, at the bottom of the first full paragraph on page 14 where you are summarizing the following sections of your testimony, you say:

". . . the California economy is
unlikely to bounce back to the point
where it will again be an engine for
above-normal telecommunications
output growth."
Do you see that?

A I do see that.

Q If we were to assume that were true, wouldn't that fact provide a disincentive for entry into new telecommunications markets?

A All else equal, slower market growth makes entry less attractive. Whether it would be a significant disincentive would require a close look. Whether the kind of change in growth rate generally anticipated would in fact swamp the size of the market as a draw would require a close look.

Q A close look which you have not performed today?

A That's correct; I haven't studied the determinants of entry into these markets.

Q Let me direct your attention to Exhibit 2, which is your reply testimony, specifically page 6.

At the bottom of the first full paragraph, you state:

"When the LECs satisfy the
Commission's requirements for
removal of such barriers" -- and I
believe you refer to entry barriers

in the prior sentence -- "they" --
and I think you're referring to the
LECs -- "should no longer face any
price regulation for those
competitive services."

Is that an accurate statement of what you intended by that testimony?

A Let me, if I may, read the paragraph to make sure --

Q Certainly.

A -- of what I intended with the content.

These barriers -- "such barriers," rather, in that last sentence, if you read back up through the paragraph -- refers to artificial entry barriers. It refers, in particular, to these barriers in the preceding sentence which then refers to artificial barriers in the sentence above that.

There is an appropriate hedge in this sentence.

"When the LECs satisfy the
Commission's requirements for
removal of such barriers, they
should no longer face any price
regulation for those competitive
services."

"Competitive services" is intended to mean services that can be reasonably anticipated to draw competition.

Again, I don't think, as a global matter, that removal of artificial entry barriers or government restrictions on entry ought always, everywhere, to justify price deregulation.

I think the Commission needs to make a judgment as to whether competition is likely and is likely to be effective.

But with that caveat, that's what that sentence intends.

Q Now, when you were referring to the LEC's satisfying Commission requirement for removal of artificial entry barriers, which artificial entry barriers were you referring to?

A This was intended to be a general statement. It wasn't based on a specific analysis of artificial barriers. It may or may not be there because I've done no such analysis. It was intended to draw a distinction in principle between the sort of approach I would favor and the sort of approach that Professor Wolak seems to favor.

Q So when you refer to artificial entry barriers, are you referring to the same entry barriers that Professor Wolak identified?

A No. I identified a long list of things. And I certainly don't mean to -- including advertising and the need to build networks. And I'm explicitly, as Footnote 6 indicates, not considering those to be artificial.

There are others that it seems to me that he raised, which, as I recall, had to do with procedures for interconnection and standards and a variety of things that did seem to be sensible things to get done on the route to local competition.

And there, the distinction I draw that I don't see is why any of this ought to be related to the X factor. It seems to me in a proceeding concerned with local competition the question with what the LECs' obligations are to permit competition should be raised, I just didn't see how, in his testimony, how this relates in any logical way to the X factor.

The Commission ought to require certain things of the LECs in order to make local competition work. That's a legitimate issue. I don't see what it has to do with this, and that's the point I'm making here.

Q So you don't see any relationship between rewarding the LECs for having eliminated barriers to entry, artificial barriers to entry -- which, by your own testimony, appear to be within their control -- by giving them relief through release from the new regulatory framework or otherwise granting them pricing flexibility?

A I think the appropriate linkage is not with the productivity factor and not with the X factor, as you suggest, with pricing flexibility. And that, it seems to me, is what I suggest here, that when competition can be made effective, when -- and it runs through the whole testimony -- that when the Commission can be reasonably certain that competition will effectively determine prices and control market power, then there ought to be pricing flexibility.

That's not so much a reward punishment. It's the natural step in the evolution toward a competition-driven system.

Q Now, you mentioned in Footnote 6, particularly with reference to Professor Wolak, I'd like to direct your attention to the last sentence in that footnote where you refer to infinite company -- infant versus infinite --

"Infant company conditions clearly do not describe the firms that compete in California. These firms include the 'big three' IXCs, with combined annual revenues over $60 billion, as well as Time Warner, which is affiliated with U.S. West."

Do you see that?

A I see that.

Q Are you suggesting that the Commission should set its regulatory regime based on the assumption that these are the only companies who will be competing in local exchange markets?

A No, certainly not.

What I'm suggesting here is, rather, that the Commission is not in a situation where it needs to protect competitors as distinct from competition. If all competitors were small and struggling infants -- hence the phrase infant company, then you might argue -- I'd even be skeptical there -- but you might argue that the Commission needs to restrict competition in order to keep competitors healthy.

Based on what I've seen, there are enough big competitors that one does not need to restrict competition in order to artificially keep them healthy.

Q So, in your view, the Commission must take an all or nothing approach to this. They can't anticipate that some of the competitors might be infant companies as compared to others who are not.

A I think in a situation in which you have financially healthy, sizable companies, there is effectively no argument for trying to shield competitors from competition, assuming that you know there aren't any other considerations that you'd like me to take into account.

But based on what I know, where you have a set of large effective competitors, it's bad public policy to restrict the vigor of competition and, thus, reduce benefits to consumers because there might be small companies that might be hurt by competition. I think that's just bad policy. ]

Q So, in your opinion, it's good public policy to establish a regulatory regime that might allow a few substantial competitors to establish an oligopoly or duopoly, as opposed to a monopoly, rather than to promote free entry into a competitive market that might include infant companies.

A I think where you can have competition, which is most markets in this country, we follow as a nation through our antitrust laws and other means by and large the proper approach to competition, which is to say we count on market forces by and large to deal with competitive problems.

Some industries wind up with large numbers of players, some industries wind up with small numbers of players.

To try to manage that process beyond removal of artificial impediments created by governments or by dominant players is almost inevitably to waste society's resources.

So I don't think that the Commission ought to be -- ought to refrain from thinking about whether competition will be effective. But if the Commission determines that competition and where the Commission determines it will be effective, the Commission ought not to waste resources trying to ensure that there are 50 competitors instead of five or 10 instead of three.

Q However, as the Commission anticipates the opening of new competitive markets that are previously monopoly regulated markets, should it not consider revising its regulatory framework to create an environment conducive to open entry that might encompass an infant company?

A I worry that you and I may be using different things -- maybe attaching different meanings to the phrase "open entry."

By "open entry" I mean without artificial impediments put there by the regulator or by the existing provider.

It should certainly not tilt against small companies.

The thrust of what I've been saying on this point is that it shouldn't tilt. You expect small companies to enter some markets, you expect large companies to enter some markets. Some large companies become small, some small companies become large.

Absent extraordinary circumstances, if the Commission reaches a judgment that competition can be effective, the Commission should permit open, unrestricted, "go get 'em" entry.

Q On footnote --

ALJ REED: Ms. Burdick?

MS. BURDICK: Yes, ma'am.

ALJ REED: Would it cut the flow of the rest of your cross if we take a break here for about an hour?

MS. BURDICK: Actually, your Honor, I think I just have one more question, and if I could ask it, then we could come back to some fresh voice.

ALJ REED: Okay. Not that we won't miss your voice.

(Laughter)

MS. BURDICK: I'm sure you'll be hearing plenty of my voice.

ALJ REED: Okay. Please continue.

MS. BURDICK: Thank you. I appreciate your patience, your Honor.

Q And, as a final matter, let me direct your attention to Footnote No. 5, particularly the second sentence of that footnote, where you say:

> "Therefore, it would take at least five years to erode the current productivity target of five percent."

Do you see that?

A Yes.

Q Specifically, referring to Professor Wolak's proposal for a permanent reduction in the productivity factor of 1 percent per year if the Commission's entry barrier reduction targets are met.

Isn't it true that under the Commission's current scheme of reviewing the New Regulatory Framework every three years, that in fact in three years that productivity factor would be reduced to the 2 percent that Pacific has made in its proposal?

A (Indicating) As a matter of arithmetic, starting at five, going at 1 percent a year for three years gets you to two.

Q And that assumes that the LECs undertake to reduce any of the artificial barriers to entry which they have under their control; does it not?

A Well, Professor Wolak's proposal assumes a certain set of targets and so forth.

Q Uh-huh?

A Um --

Q And was that your understanding of Professor Wolak's proposal?

A That was my understanding of Professor Wolak's proposal, yes.

Q So even though you say it would take at least five years to erode the current productivity factor, in fact the Commission could revise it in less time than five years; could they not?

A Well, I -- as to whether his -- his proposal seemed to anticipate something being put in place and -- and (indicating) going forward in a longer horizon.

The Commission could, of course, review it in three years or could review it in six months if it so chose.

Q And even if it didn't review it in three years, assuming Professor Wolak's proposal, the productivity factor would equal that that Pacific has proposed as being acceptable in the alternative; isn't that true?

A Assuming that Professor Wolak's proposal was adopted and Pacific meets the targets, then under that proposal, after three years it goes down to the level that they have proposed for Commission adoption now. Correct.

MS. BURDICK: Thank you, Dr. Schmalensee.

That's all I have.

ALJ REED: Thank you. Why don't we return at 1:10.

(Whereupon, at the hour of 12:10 p.m., a recess was taken until 1:10 p.m.)

* * * * *

AFTERNOON SESSION - 1:10 PM

* * * * *

ADMINISTRATIVE LAW JUDGE REED: On the record.

RICHARD LEE SCHMALENSEE

resumed the stand and testified further as follows:

CROSS-EXAMINATION

BY MR. BROWN:

Q Good afternoon, Mr. Schmalensee.

A Good afternoon.

Q My name is Mark Brown. I'm representing MCI today. I have a few questions for you regarding your testimony.

I would like to refer you to page 8 of the attachment to Exhibit 1 of your prepared direct testimony.

And referring you to the second full paragraph of that page, Dr. Schmalensee, earlier today you had a discussion regarding this section, and I believe with counsel for CCTA; do you remember that discussion?

A Yes.

Q And I believe here, in this paragraph I referred you to, you discuss Professor Kahn's prescription for how regulation should evolve in the face of growing competition, setting forth certain principles.

My understanding is you've endorsed these principles; is that correct, sir?

A In a general way. Whether Professor Kahn and I agree on all specifics and applications, I couldn't say, but I endorse them as a general matter, yes.
Q Thank you.
And is it your testimony or belief that Pacific's plan meets these principles as set forth here?
A Pacific's plan in this hearing, in this proceeding, rather, is silent on most of them.
The reason for the discussion here is to attempt to place the proposal for removal of the formula in context.
But Pacific's plan here doesn't deal with rate rebalancing, doesn't deal here with input pricing and so forth.
Q Thank you.
I believe -- I refer you to Exhibit 2, Attachment 1 of that exhibit, your reply testimony; do you have that document, sir?
A Yes.
Q In that document, on page 4, you begin a discussion of -- starting with Section B, of the True Price Caps testimony of Dr. Nina Cornell on behalf of MCI?
Do you see that reference, sir?
A Yes, that begins on page 3, in fact.
Q Excuse me. I'm sorry. And continuing on on page 4. Thank you.

A Yes.

Q As I -- I believe that in this section you have set forth the basic -- what you perceive to be as basic elements of Dr. Cornell's proposal in this proceeding; is that correct?

A It was an attempt to summarize them, I hope without undue distortion.

Q That you.

I'd like to briefly ask you to compare each -- Dr. Cornell's recommendations as you've set them forth in your testimony to the principles or prescriptions that Dr. Kahn has set forth for how regulation should evolve in the face of growing competition.

For example, the first rule that Dr. Kahn has set forth, sir, is:

"...efficient entry requires that prices be efficient, i.e., rates be rebalanced to eliminate subsidies and/or competitive neutral for universal service funding mechanism be in place ..."

Do you see that reference, sir?

A I do see that reference.

Q Is it your understanding that Dr. Cornell's proposal as set forth in your summary of it meets that criteria?

A It is my understanding it does not because her proposal, as I understand it, is to cap rates for noncompetitive services at current levels. Dr. Kahn's proposal is that rates be rebalanced, and that would of course require moving below-cost rates at least to cost or providing some subsidy mechanism.

So she refers to current levels in the second bullet, or my second bullet interprets her as referring to current levels, and Kahn basically is referring to a cost-based test.

Q Are you aware of any services in California outside of residential services, access services that are currently priced below cost?

A I am not aware of any such services. I haven't done a detailed test. But my understanding is that the main and perhaps exclusive, but certainly the most important service below cost is basic residential. There may be others of less importance of which I'm not aware.

Q Is it your understanding that the imposition of a competitively neutral universal service funding mechanism would alleviate that problem?

A It would change the problem. It would basically call for the subsidy to be provided by, at least as I understand the proposal in rough outlines, by a tax, if you will pardon the word, on all providers instead of a tax on the firm that happens to be providing that below-cost service.

Q Thank you.

If we could continue with the descriptions that Professor Kahn has set forth and comparing them to the principles of Dr. Cornell's price-cap proposal.

I believe the second principle is that open entry demands deregulation of the incumbent services that are no longer monopoly provided --

A Again, while there may be issues of detail --

MR. SASSER: I don't know if we had a question, your Honor.

THE WITNESS: I'm sorry. Excuse me.

MR. BROWN: Q To be clear, my question, Dr. Schmalensee, was do you believe that Dr. Cornell's proposal complies with his second principle?

A I denied telepathic powers this morning, and this afternoon I acted as if I had them. That was the question I was preparing to answer.

I think again, while there may be issues of detail, that her proposal is broadly consistent with that principle.

Q Thank you.

And the third principle that Dr. Kahn has set forth, price protection must be provided for essential services not yet subject to widespread competition, the same question.

A She envisions providing price protection when she says cap rates. So in that sense, it's consistent. Neither Kahn nor I would want to think about or want to tie the cap particularly to current levels.

But certainly she does, as any economist would, recognize the need to provide price protection. It is my understanding her proposal intends to do that.

Q Thank you.

And, finally, with regard to the fourth recommendation or prescription of Dr. Kahn, input essential for competition must be made available on a nondiscriminatory basis, including the imposition of an imputation test on LEC retail services, is it your understanding that Dr. Cornell's proposal complies with that principle?

A Again, I would need to refresh myself as to the details of her proposal.

My recollection, however, is that what's in her proposal that corresponds to the first bullet on page 3 envisions pricing input essential for competition, which is what I mean there by essential input, at cost; i.e., without making a contribution to joint and common costs.

I think that's broadly inconsistent, at least with the way I would apply the Kahn principle. If these are indeed input essential for competition unavailable from any source other than the LEC, we are pricing what is in effect a natural monopoly set of products.

And I don't know of any economic principles for pricing products of that sort that don't envision making a contribution to common costs.

So in that sense, there is a difference.

Q In your opinion, sir, would Dr. Cornell's proposal pass an imputation test?

A In the presence -- well, it depends on exactly how she defines cost. And I need to look more closely at it.

If she means all product-specific costs, then as a general matter it would pass the imputation test in the sense that -- yes.

Q And in your opinion, is the proposal on this issue nondiscriminatory in nature?

A If I understand her proposal, it is nondiscriminatory, yes.

Q Thank you. I have been referring you back and forth between your two exhibits. I again refer to you Exhibit 2, the attachment to Exhibit 2, your reply testimony.

In the Section B, the section we have been discussing, sir, you refer to Dr. Cornell's proposal as providing an end-state similar to Pacific's proposal in this proceeding. Do you see that reference?

A You are referring to the second sentence under B on 3?

Q Yes.

A She shares a similar vision of the end-state?

Q That is correct.

A I do see that sentence.

Q And I believe you go on to list on the next page, on page 4, in the first full paragraph, you go on to list two important ways in which I believe you view